
Nomenclatural Changes in North American *Lilium* (Liliaceae)

Mark W. Skinner

USDA-NRCS, National Plant Data Center, P.O. Box 74490, Baton Rouge,
Louisiana 70874, U.S.A.
mskinner@po.nrcs.usda.gov

ABSTRACT. The approaching release of the *Flora of North America* Volume 26 requires the formal publication of several nomenclatural changes that will appear there. The proposed changes standardize infraspecific nomenclature in North American *Lilium* at the subspecies level, which is appropriate for these geographically segregated yet morphometrically overlapping and intergrading taxonomic units. The changes include a new rank for *Lilium washingtonianum* Kellogg subsp. *purpurascens* (Stearn) M. W. Skinner, and several new combinations: *L. pardalinum* Kellogg subsp. *pitkinense* (Beane & Vollmer) M. W. Skinner, *L. pardalinum* Kellogg subsp. *shastense* (Eastwood) M. W. Skinner, *L. pardalinum* Kellogg subsp. *vollmeri* (Eastwood) M. W. Skinner, and *L. pardalinum* Kellogg subsp. *wigginsii* (Beane & Vollmer) M. W. Skinner. Lectotypes are designated for *L. pardalinum* and *L. washingtonianum* and for the synonym *L. parvum* Kellogg var. *luteum* Purdy, and a neotype is selected for *L. washingtonianum* subsp. *purpurascens*.

Key words: Liliaceae, *Lilium*, North America.

Ongoing biosystematic investigations of North American *Lilium* (Skinner, 1988, 1993) compel the publication of several new combinations that will appear in the *Flora of North America*. The taxa recognized and named below display significant and geographically coherent variation that is best expressed at the subspecies level (Thorne, 1978): morphological dimensions overlap between geographically adjacent taxa, variation is roughly clinal across zones of intergradation, and reproductive isolation between subspecies is primarily achieved geographically. The new names achieve uniformity at the subspecific rank for infraspecific nomenclature in North American *Lilium*. Types are supplied for one synonym, and for accepted names that currently lack them. Because prior workers often ignored or were unfamiliar with each other's work and/or the formalities of type designation, and frequently misapplied names with or without attribution to prior circumscriptions, the nomenclatural literature and history in western North American

Lilium is abstruse. This prompts the often lengthy discussions below.

Lilium pardalinum Kellogg, *Hesperian* 3: 300. 1859. TYPE: Illustration, *Hesperian* 3(1) frontispiece, 1859 (lectotype, designated here, *University of California at San Diego*).

Lilium pardalinum var. *angustifolium* Kellogg, *Hesperian* 3: 300. 1859. TYPE: not designated.

Lilium roezlii Regel, *Gartenflora* 19: 321, t. 667. 1870, as "*L. roezlii*," non *L. roezlii* Purdy, *J. Int. Gard. Club* 3(4): 522. 1919. TYPE: not designated.

Lilium harrisianum Beane & Vollmer, *Contr. Dudley Herb.* 4: 357. 1955. TYPE: not designated.

A. M. Kellogg (1859a) did not formally designate type material for *Lilium pardalinum*. At the California Academy of Sciences where Kellogg worked, most of the types were saved from the fire following the earthquake of 1906 by Alice Eastwood, but none of Kellogg's lily types (Vollmer, 1939) or other original specimens survived. In his monograph, Elwes (1877–1880) mentioned receiving a letter from Sereno Watson in 1878 in which Watson cited some Kellogg material of *L. pardalinum* and *L. pardalinum* var. *angustifolium* Kellogg at his disposal. In the letter Watson noted that Kellogg's specimen of *L. pardalinum* was from Alameda County, California (just across the San Francisco Bay from CAS); thus Alameda County can be inferred as the probable *L. pardalinum* type locality. Watson would have been at Harvard's Gray Herbarium when he wrote that letter (Stafleu & Cowan, 1988), but his specimens of *L. pardalinum* and its variety *angustifolium* are not at GH or other likely herbaria including CAS, K, MO, UC/JEPS, or US. It is likely they were returned by Watson to Kellogg and destroyed in the 1906 event.

The *Hesperian* illustrations of the plants that Kellogg described were prepared at his direction (Curran, 1885), and an illustration of *Lilium pardalinum* accompanies the protologue (Kellogg, 1859a: frontispiece). Although it comes after the title page and table of contents, this illustration has been cited as the frontispiece (Woodcock & Stearn, 1950) and is so cited here. It is one of two such plates for *Hes-*

bulb scales (1–)2–4-segmented; sepals 3.7–7.6 cm; northern California and adjacent southern Oregon . . . *Lilium pardalinum* subsp. *shastense*
*Measurements are based on fresh material and are lengths unless otherwise noted.

1a. *Lilium pardalinum* subsp. *pardalinum*

Lilium pardalinum Kellogg subsp. *pardalinum* is confined to California, and is variable in flower size, color, and leaf size and shape. Along the length of the Sierra Nevada this subspecies is replaced at higher elevations by a congener: in the north by *L. pardalinum* Kellogg subsp. *shastense* (Eastwood) M. W. Skinner, then by *L. parvum* Kellogg, and finally by *L. kelleyanum* Lemmon in the high Sierra to the south. In the Klamath Mountains it gives way to *L. pardalinum* subsp. *vollmeri* in Del Norte County, *L. pardalinum* subsp. *wigginsii* in northern Humboldt County, and to *L. pardalinum* subsp. *shastense* in northeastern Trinity County. The range disjunction between the south coast ranges in Santa Barbara County and the Peninsular ranges in San Diego County probably exists because *L. parryi* S. Watson is the sister group to *L. pardalinum* (Skinner, 1988) and replaces it in the high mountains of southern California.

Representative specimens. U.S.A. **California:** Colusa Co., Box Springs, 10 July 1972, *Alice Q. Howard 11* (JEPS); Humboldt Co., on Butte Creek Rd. [near Bridgeville, 1.1 mi. from intersection with Highway 36], 2500 ft., 24 July 1983, *M. W. Skinner 128* (GH); Placer Co., Bear Valley, July 1951, *A. M. Vollmer & L. Beane 188* (US); Sierra Co., Goodyear's Bar, T19N R10E SW 1/4 of S6, 2600 ft., 16 July 1983, *M. W. Skinner 115* (GH).

1b. *Lilium pardalinum* subsp. *pitkinense* (Beane & Vollmer) M. W. Skinner, comb. et stat. nov. Basionym: *Lilium pitkinense* Beane & Vollmer, Contr. Dudley Herb. 4: 356. 1955. TYPE: U.S.A. California: Sonoma Co., Pitkin Marsh, 20 July 1954, *L. Beane & A. M. Vollmer 1270* (holotype, DS not seen).

The Pitkin Marsh lily is a local expression of *Lilium pardalinum* with small flowers, short stamens, and brighter anthers than most members of subspecies *pardalinum*. It is known only from the vicinity of Sebastopol in Sonoma County, California. Plants that match the type concept in Beane (1955) are extremely rare and found only in Pitkin Marsh. Plants from nearby marshes are somewhat more variable, and some clones with larger flowers, longer stamens, and darker rust-colored pollen begin to approach subspecies *pardalinum* in flower morphology; hybrids or plants virtually indistinguish-

able from subspecies *pardalinum* occur a few miles from Pitkin Marsh. *Lilium pardalinum* subsp. *pitkinense* can be distinguished with some difficulty from *L. pardalinum* subsp. *shastense* by its darker red-orange or brown-orange pollen.

Representative specimen. U.S.A. **California:** Contra Costa Co., cultivated at Canyon by Bert Johnson (propagated from material collected in Pitkin Marsh, Sonoma Co., California, 3 June 1983, by J. Bartel and A. Q. Howard), 20 June 1987, *A. Q. Howard 20* (GH).

1c. *Lilium pardalinum* subsp. *shastense* (Eastwood) M. W. Skinner, comb. et stat. nov. Basionym: *Lilium nevadense* var. *shastense* Eastwood, Leaflet. W. Bot. 1: 42. 1933. *Lilium shastense* (Eastwood) Beane, Contr. Dudley Herb. 4: 357. 1955. TYPE: U.S.A. California: Shasta Co., Goose Valley, George Dillman ranch, July 1912, *A. Eastwood 799A* (holotype, CAS not seen).

Lilium nevadense Eastwood var. *nevadense*, Leaflet. W. Bot. 1: 41. 1933. Syn. nov. TYPE: U.S.A. California: Shasta Co., Goose Valley, George Dillman ranch, July 1912, *Eastwood 799* (holotype, CAS not seen).

Lilium parvum Kellogg var. *luteum* Purdy, Erythea 5: 105. 1897. *Lilium parviflorum* (Hooker) Purdy var. *luteum* (Purdy) Purdy, Gard. and Forest 10: 502. 1897. TYPE: U.S.A. California: Plumas Co., Swamps-Butterfly Valley, 12 June 1897, *R. M. Austin 1025* (lectotype, designated here, US).

For the synonym *Lilium parvum* Kellogg var. *luteum* Purdy I have selected as lectotype a Plumas County, California, collection by Mrs. R. M. Austin. Purdy evidently based his name and description at least in part on Austin's collection or her description of it, since he noted (1897a: 105), "This showy form of *L. parvum* is from Plumas County, where it was collected by Mrs. Austin." Austin's collection is the only known original material of *L. parvum* var. *luteum*.

In California, *Lilium pardalinum* subsp. *shastense* occurs in the Sierra Nevada from Sierra and Butte Counties north to the region surrounding Mt. Shasta, and thence west to the Klamath Mountains in eastern Trinity County, and to western Siskiyou County where it intergrades with *L. pardalinum* subsp. *wigginsii*. A collection at US (*Mrs. M. M. Hardy 1509*) indicates that the southern limit of *L. pardalinum* subsp. *shastense* may extend as far as Placer County at moderately high elevations (ca. 1800 m) in the Sierra, although *L. pardalinum* subsp. *pardalinum* occurs nearby at lower elevations, for example, Bear Valley (also in Placer Co. at ca. 1400 m). Plants from near Klamath Falls, Oregon, are presumed on the basis of morphology

to be this subspecies, though live material of them has not been studied.

Eastwood (1933: 42) considered that "*Lilium nevadense* and its varieties include the small-flowered tiger lilies of the Sierra Nevada." This initial publication of *Lilium nevadense* Eastwood included descriptions of three varieties: *L. nevadense* var. *shastense* Eastwood, *L. nevadense* var. *monense* Eastwood, and *L. nevadense* var. *fresnense* Eastwood. Based on geographical range and morphological description, the latter two names refer to the southern Sierran lily now known as *L. kelleyanum* Lemmon (1903), so they are of little further interest here. Eastwood (1933) designated a single Shasta County location (George Dillman ranch, Goose Valley, Shasta Co., California) as the type locality for both *L. nevadense* and *L. nevadense* var. *shastense*, though she did designate different collections as types (*Eastwood* 799 for the species, *Eastwood* 799A for the variety). She assigned no unique geographical range to the variety *shastense*, although specimen citations in the protologue indicate that it extended from a northern limit in Siskiyou County south to Plumas County. Though she did not mention the autonym by name, specimens cited under *L. nevadense* exclusive of the named varieties indicate that its range coincided more or less with that of variety *shastense*, though extending farther south and encompassing Sierra County as well. Her Latin diagnosis (Eastwood, 1933) and subsequent English description (Eastwood, 1948c: 136) indicate that *L. nevadense* var. *shastense* is characterized by "narrower, more numerous and erect leaves" than the "typical" variety. In fact, *Lilium pardalinum* subsp. *shastense* includes individuals with narrow leaves and others with broad leaves, often within the same population, so Eastwood's distinction of entities with differently shaped leaves is not maintained here.

Thus *Lilium nevadense* var. *nevadense* and variety *shastense* were published simultaneously (Eastwood, 1933), and both names apply to the material encompassed under the new combination. The autonym has priority over variety *shastense* (Greuter et al., 2000, Art. 11.6), but only within the named rank (Art. 11.2). As there are no applicable epithets at the subspecies level, *shastense* is selected here for the small-flowered subspecies of *Lilium pardalinum* in northeastern California. This is appropriate for several reasons. First, Beane (1955) published *Lilium shastense* to represent the small-flowered *L. pardalinum* growing in Siskiyou, Shasta, and Plumas Counties. Because of Beane's action it is also the epithet I used—though did not publish formally—in *The Jepson Manual* (Hickman, 1993). Fi-

nally, *shastense* is preferable because the plant is common both in Shasta County and around the base of Mt. Shasta in Siskiyou County, and because the epithet *nevadense* has been erroneously linked to and therefore confused with *L. kelleyanum* via the varieties *monense*, *fresnense*, and *inyoense* Eastwood (Eastwood, 1941).

Other earlier epithets that might have been adopted for this purpose are rejected for various reasons. Purdy (1897a: 105) first published *Lilium parvum* var. *luteum* for the "showy form [of *L. parvum*] . . . from Plumas County" with "segments of the perianth revolute at the base," thus clearly designating the plant recognized here as *L. pardalinum* subsp. *shastense* and distinguishing it from the tubular-flowered *L. parvum*. Purdy (1897b) subsequently decided that *L. parvum* Kellogg should be restricted to plants with horizontal to ascending trumpet-shaped flowers (its current application), and transferred the plants with revolute perianth and pendent flowers from subalpine Plumas County to a new small-flowered Sierran taxon that can be cited as *L. parviflorum* (Hooker) Purdy var. *luteum* (Purdy) Purdy. *Lilium parviflorum* (Hooker) Purdy [var. *parviflorum*] encompassed similar plants (1897b: 502) from "the middle belt of the Sierra Nevada from Tulare County, to the south, to the base of Mt. Shasta." But Purdy's (1897b) use of *Lilium parviflorum* to describe the plant here called *L. pardalinum* subsp. *shastense* was inappropriate. Based on geography and flower size, *L. canadense* L. var. *parviflorum* Hooker (1838: 181), "[from the] Columbia and Walamet [sic] Rivers," clearly refers to what is now known as *L. columbianum* hort. Leichtlin in Ducharte (1871; see end note for discussion of this apparently new citation for *L. columbianum*). With this meaning it was first elevated to species level as *L. parviflorum* by W. G. Smith (1874), who evidently was not aware of *L. columbianum*; thus *L. parviflorum* (Hooker) Purdy is not only a misapplication but is objectionable as a later homonym (Greuter et al., 2000, Art. 53.1). Despite the illegitimate binomial, there is no inherent objection to reusing the final epithet of Purdy's (1897b) name *L. parviflorum* var. *luteum* (Purdy) Purdy within *L. pardalinum* for the plant named here (Greuter et al., 2000, Art. 55.2). Yet this, too, is precluded (Greuter et al., 2000, Art. 53.4) by the very different and prior-named *L. pardalinum* Kellogg var. *luteum* hort. T. S. Ware (in Marshall, 1889), with "yellow flowers spotted with brownish purple" that occurs "in the south, as well as more inland [in California]" (Woodcock & Stearn, 1950: 301, 303). Eastwood (1902) employed the epithet *parviflorum* in an entirely new context with publi-

cation of *L. pardalinum* Kellogg [var.] *parviflorum* Eastwood (= *L. kelleyanum* Lemmon; see end note re: priority of *L. kelleyanum*), and Johnston (1923) later misapplied Eastwood's name to the taxon named here. Eastwood's action renders the epithet *parviflorum*, like *luteum*, unavailable for the present use at any infraspecific rank within *L. pardalinum* (Greuter et al., 2000, Art. 53.4).

Representative specimens. U.S.A. **California:** Butte Co., Little Chico Creek, 1000 ft., 5 July 1900, *John B. Leiber* 5011 (US); Lassen Co., Susanville, Perkin's Ranch, 4800 ft., 26 June 1897, *Marcus E. Jones*, A.M. s.n. (US); Placer Co., 1893, *Mrs. M. M. Hardy* 1509 (US); Plumas Co., Butterfly Valley, 25 June 1912, *H. M. Hall* 9273 (US); Shasta Co., Goose Valley (near Burney), 29 June, 11 July 1912, *Alice Eastwood* 857 (US); Sierra Co., Salmon Lake, July 1918, *Mrs. E. C. Sutcliffe* s.n. (US); Siskiyou Co., McCloud River above Big Springs, T39N R2W SW 1/4 of NW 1/4 of S13, 6 Aug. 1984, *M. W. Skinner* 195 (GH); town of Mt. Shasta Campgrounds of America, swampy ground near RR tracks, T40N R4W S9 3900 ft., 27 July 1988, *M. W. Skinner* 266 (GH); in spring, Cayenne Ridge, Marble Mountain, 6 July 1940, *Marion Ownbey* 2200, *Fred G. Meyer* (US); Tehama Co., Brookside, Butt Mt., Deer Creek Canyon, 1500 m, 16 July 1911, *W. W. Eggleston* 7249 (US); Trinity Co., Dan Rice Cr. on Scott Mt., Shasta-Trinity National Forest, T39N R7W NE 1/16 of S9, 4600 ft., 26 July 1988, *M. W. Skinner* 264 (GH). **Oregon:** Klamath Co., meadows and woods near Lake of the Woods, Cascade Mts., 5000–6000 ft., 5 July 1936, *J. William Thompson* 13102 (US).

1d. *Lilium pardalinum* subsp. *vollmeri* (Eastwood) M. W. Skinner, comb. et stat. nov. Basionym: *Lilium vollmeri* Eastwood, Leaflet. W. Bot. 5: 121. 1948b. TYPE: U.S.A. California: Del Norte Co., *Darlingtonia* bog 1 mi. W of Eleven Mile Creek on the old Gasquet-Grants Pass road, 3 July 1940, *A. M. Vollmer* & *I. L. Wiggins* 3 (holotype, DS not seen; isotype, UC).

Lilium pardalinum subsp. *vollmeri* (Eastwood) M. W. Skinner is a narrow serpentine endemic lily of the Siskiyou Mountains in extreme northwestern California and adjacent Oregon. A collection (*E. W. Hammond* 384, US) from near Wimer in Jackson County, Oregon, evidently represents the northernmost extent of this taxon. To the south it intergrades with *L. pardalinum* subsp. *pardalinum*, but can generally be distinguished by its somewhat smaller flowers (sepal length typically is 5.3–8.3 cm vs. 6.6–10.4 cm in subsp. *pardalinum*), which are often redder apically, and its frequently ascending, narrowly elliptic or linear leaves. Northern populations in Curry County, Oregon, as well as those in the shade throughout its range, are rather similar to *L. pardalinum* subsp. *pardalinum*, though generally the plants are less overtly clonal and therefore less

clumped. In the eastern part of its range, for example west of Grayback Mountain in Josephine County, Oregon, and near Sanger Peak in Del Norte County, California, it intergrades extensively with *L. pardalinum* Kellogg subsp. *wigginsii* (Beane & Vollmer) M. W. Skinner, producing swarms of intermediate individuals that vary greatly in leaf arrangement and shape, and flower and anther coloration.

Purdy (1919: 522) applied the name *Lilium roezlii* to this plant, but this was an orthographic correction and misapplication of *Lilium roezlii* Regel (1870: 521, as "*L. roezli*"), a taxon of uncertain provenance and identity. Although the illustration (Regel, 1870: t. 667; it is labeled "*L. roezlei*") accompanying Regel's lily shows a narrow-leaved *Lilium pardalinum*-type lily, the implied locality of Utah (from "Mormon States") is clearly in error as no native *Lilium* occur in Utah. Based on Roezl's travels, Eastwood (1948a) decided that Roezl collected it in the Sierra Nevada; thus Regel's *Lilium roezlii* is generally considered to be synonymous with *L. pardalinum* var. *angustifolium* Kellogg (1859a: 300), itself a synonym of *L. pardalinum* subsp. *pardalinum*.

Purdy (1919) determined that there were two forms of his *Lilium roezlii*. He first (1901: 354) identified the form with flowers "orange dotted with maroon," which he subsequently (1919: 522) called the "type." This plant was later named *L. wigginsii* Beane & Vollmer (in Beane, 1955), and is combined below as another subspecies of *L. pardalinum* Kellogg. The other he described (1919: 522) as growing farther to the west and "orange in the center and deep crimson on the outer two thirds." It is this plant that Eastwood later described as *L. vollmeri*, the type of which she said (1948b: 122) was initially (mis)identified by Albert M. Vollmer as *L. roezlii* Regel.

Eastwood's suggestion (1948b: 123) that her new species *Lilium vollmeri* is perhaps only an ecological variety of *L. occidentale* Purdy is not supportable; the more or less parallel stamens and unbranched rhizome of *Lilium occidentale* are uniquely at odds with *L. pardalinum*.

Representative specimens. U.S.A. **California:** Del Norte Co., Old Gasquet Toll Rd. at mile marker 10.75, in meadow, T17N R3E NE 1/4 of SW 1/4, 1800 ft., 22 July 1985, *M. W. Skinner* 199 (GH). **Oregon:** Curry Co., U.S. Forest Service Rd. 3698, 0.4 mi. before 3795, T37S R12W NE 1/4 of SE 1/4, 3700 ft., 24 July 1985, *M. W. Skinner* 201 (GH).

1e. *Lilium pardalinum* subsp. *wigginsii* (Beane & Vollmer) M. W. Skinner, comb. et stat. nov. Basionym: *Lilium wigginsii* Beane & Vollmer, Contr. Dudley Herb. 4: 355. 1955. TYPE: U.S.A. California: Siskiyou Co., Siskiyou Mountains near the Oregon border W of Highway 99, 16 July 1954, L. Beane & A. M. Vollmer 1266 (holotype, DS not seen; isotypes, MO, US).

Lilium pardalinum subsp. *wigginsii* is a Klamath Mountain endemic lily that occurs broadly along the boundary between Del Norte and Siskiyou Counties, California, and east through southeast Josephine County, Oregon, to Mt. Ashland in Jackson County (Ballantyne, 1980). It intergrades with *L. pardalinum* subsp. *shastense* in the Marble Mountains of Siskiyou County, California. The solid orange or yellow-orange flowers and yellow anthers are distinctive. Genetic instability in this subspecies is frequently expressed as malformed flowers with shrunk or missing reproductive structures, and is probably due to introgression with other *L. pardalinum* subspecies; similarly malformed flowers occur where *L. canadense* and *L. grayi* S. Watson intergrade in Virginia (Skinner, pers. obs.).

Purdy's (1901, 1919) application of the name *Lilium roezlii* Regel to this taxon is discussed above under *L. pardalinum* subsp. *vollmeri*. In the protologue for *L. wigginsii*, here reduced to a subspecies, Beane (1955: 355) noted that "this [may have been the lily] offered to the florist trade by Mr. Carl Purdy under the name *Lilium roezlii* (yellow) Regel." This is certainly consistent with Purdy's (1919, 1935) own writings.

Representative specimens. U.S.A. **California:** Siskiyou Co., Happy Camp to O'Brien Rd. at mile marker 7.5, T18N R6E S10, 4100 ft., 21 July 1985, M. W. Skinner 198 (GH). **Oregon:** Jackson Co., Rogue River National Forest, 1.5 mi. S of Ashland Campground, T40S R1E SW 1/4 of SW 1/4 of S20, 23 July 1988, M. W. Skinner 255 (GH); Josephine Co., Grayback Rd., 6.2 mi. from junction with Forest Service Rd. 4611/070, T39S R7E w 1/4 of S25, 3200 ft., 22 July 1988, M. W. Skinner 254 (GH).

2. *Lilium washingtonianum* Kellogg, Hesperian 3: 340. 1859. TYPE: Illustration, Hesperian 3: 341. 1859 (lectotype, designated here).

A. M. Kellogg (1859b) did not formally designate type material for *Lilium washingtonianum*, and specimen material associated with the protologue is unknown. There are no Kellogg specimens of *L. washingtonianum* at likely major herbaria including K, MO, UC/JEPS, or US. The only known Kellogg specimen of *L. washingtonianum* [A. M. Kellogg & Harford 898 (or 998, the number is

illegible), GH] lacks locality information (Walter Kittredge, pers. comm. 2001) and is therefore unsuitable. The protologue contains no indication of any specimens that Kellogg relied on other than his own. It appears that the illustration from the protologue (Kellogg, 1859b: 341) is the earliest surviving original material associated with Kellogg's description, so it is chosen here as the lectotype following the rationale for typification of *Lilium pardalinum* discussed above. It is a black and white drawing of a mature fruit (Kellogg, 1859b: 341).

KEY TO THE SUBSPECIES OF *LILium WASHINGTONIANUM* KELLOGG

- 1a. Sepals and petals aging light pink or remaining white; bulbs usually (36%) without notched or segmented scales; sepals 8–11.3 cm; Sierra Nevada and southern Cascades of California
Lilium washingtonianum subsp. *washingtonianum*
- 1b. Sepals and petals aging deep pink or lavender; bulbs usually (88%) with some notched or segmented scales; sepals (6.1–)6.7–9.5 cm; mountains of northern California and Oregon . . .
. . . . *Lilium washingtonianum* subsp. *purpurascens*

2a. *Lilium washingtonianum* subsp. *washingtonianum*

Distribution. California: the Sierra Nevada from Fresno County north to the southern Cascade Ranges at Mt. Shasta.

Representative specimens. U.S.A. **California:** Butte Co., cut-over yellow pine forest now grown up to dense brush about 1/2 mi. W of Chaparral, very fragrant, 5100 ft., 6 July 1940, Albert M. Vollmer & Ira L. Wiggins 10 (US); Mariposa Co., near Yosemite, Sierra Nevada, 1875, John Muir 8095 (MO); Nevada Co., Highway 20, 2.7 mi. NE of White Cloud Campground, 14 July 1983, M. W. Skinner 104 (GH); Tuolumne Co., hill S of Camp 127, 7500 ft., 21 July 1863, W. H. Brewer 1931 (US).

2b. *Lilium washingtonianum* subsp. *purpurascens* (Stearn) M. W. Skinner, stat. nov. Basionym: *Lilium washingtonianum* var. *purpurascens* Stearn, Gard. Chron. 124: 13. 1948. *Lilium purpureum* Purdy, J. Roy. Hort. Soc. 26: 351–362. 1901. *Lilium washingtonianum* var. *purpureum* (Purdy) Purdy, J. Int. Gard. Club 3: 509. 1919, non *Lilium washingtonianum* var. *purpureum* hort. W. Bull. ex Baker, J. Linn. Soc. Bot. 14: 233. 1874. TYPE: U.S.A. California: Humboldt Co., 0.4 mi. S of Onion Lake on U.S. Forest Service road 13N01, T11N R4E SE 1/4 of SE 1/4 of S6, 4400 ft., 5 Aug. 1983, M. W. Skinner 161a & b (neotype, designated here, GH).

With this taxon, Carl Purdy (1901, 1919) polished his habit of appropriating previously pub-

lished names and misapplying them to other taxonomic concepts, often without attribution to the original authors. To describe the pink-flowered northern plants of *Lilium washingtonianum* Kellogg here called *Lilium washingtonianum* Kellogg subsp. *purpurascens* (Stearn) M. W. Skinner, Purdy (1901) evidently recycled the final epithet of *L. washingtonianum* Kellogg var. *purpureum* hort. W. Bull ex Baker (1874) (= *L. rubescens* Watson, 1879) and elevated it to species as *L. purpureum* Purdy. [According to T. Masters (1874), *L. washingtonianum* Kellogg var. *purpureum* hort. W. Bull ex Baker had first been distributed (but not formally published) by Bull as *L. purpureum* in 1873; subsequent mentions of the latter name by Masters (1874) and T. Moore (1874) did not validly affect publication since neither author accepted the taxon (Greuter et al., 2000, Art. 34.1).] Curiously, Purdy (1901) reproduced in support of his *L. purpureum* the illustration from Masters's (1874) supplemental description of *L. washingtonianum* var. *purpureum* hort. W. Bull ex Baker (1874), the ascending and erect flowers of which clearly diagnose *L. rubescens* S. Watson. Watson (1879) had cited Baker's name in synonymy and Masters's use of it and his work links the name *L. rubescens* to that particular illustration. Despite illustrating the wrong taxon—for which he confusingly retained the original Masters (1874) label of *L. washingtonianum* var. *purpureum*—Purdy's (1901) description of *L. purpureum* unequivocally indicates what is here called *Lilium washingtonianum* subsp. *purpurascens*. (Purdy notes a distribution extending through Oregon to the Columbia River and heavy bulb with jointed scales, a combination which could diagnose no other taxon.) Purdy subsequently (1919) reevaluated his new species and reduced it to *L. washingtonianum* var. *purpureum* (Purdy) Purdy, although he (1901: 361; 1919: 511) and others considered this same name sensu Baker (1874) to be a synonym of *L. rubescens*. Stearn (1948) recognized that *L. washingtonianum* var. *purpureum* sensu Purdy conflicted with the earlier Baker name, and rectified this with a new name, *L. washingtonianum* var. *purpurascens* Stearn. The present action elevates Stearn's name to subspecies.

W. T. Stearn did not designate type material of *L. washingtonianum* var. *purpurascens* nor was there a diagnostic illustration accompanying the protologue. According to Roy Vickery (BM, pers. comm. 2001), there are no specimens annotated by Stearn to variety *purpurascens* at BM, where Stearn worked and deposited his collections, nor is there any known material of this taxon annotated or collected by Carl Purdy. The lack of original type ma-

terial necessitates designation of a neotype; for this I have chosen a collection from Humboldt County, California, an area that Purdy knew well and which was undoubtedly close to the place that provided the plants on which his taxon was based.

Lilium washingtonianum subsp. *purpurascens* supplants the Sierran subspecies *washingtonianum* near Mt. Shasta in Siskiyou County, California, where intermediates occur, and extends west through the Klamath Mountains and north through the Cascade ranges to Mt. Hood in Clackamas County, Oregon. In addition to the characters mentioned in the key, subspecies *purpurascens* is distinguished from subspecies *washingtonianum* by more compact bulbs with longer scales. These modest differences indicate that these taxa are best recognized as subspecies rather than species.

Representative specimens. U.S.A. **California:** Humboldt Co., Forest Service 15N01 [the Gasquet–Orleans road], 3.8 mi. S of intersection with Forest Service 13N01, T12N R5E NE 1/4 of NW 1/4 of S16, 4400 ft., 30 July 1983, M. W. Skinner 143 (GH); 0.4 mi. S of Onion Lake on U.S. Forest Service road 13N01, T11N R4E SE 1/4 of SE 1/4 of S6, 4400 ft., 5 Aug. 1983, M. W. Skinner 162a & b (GH); Siskiyou Co., among shrubs, summit of Cayenne Ridge, Marble Mountain, flowers white with purple spots, 6 July 1940, Marion Ownbey 2196, with Fred G. Meyer (US). **Oregon:** Klamath Co., Swan Lake Valley, 7 July 1905, Elmer I. Applegate 705 (US).

A NOTE ON THE CORRECT CITATION OF *L. COLUMBIANUM*

Ducharte's (1871) recapitulation in July 1871 of a letter from M. Leichtlin apparently represents the first confirmed and valid publication of *Lilium columbianum*; thus the name may be cited as *L. columbianum* hort. Leichtlin in Ducharte, J. Soc. Cent. Hort. France sér. 2, 5: 98 (1871). Leichtlin's letter and Ducharte's commentary provide the distribution and distinguishing features of the taxon, and precede by two months a short, unauthored notice (Anonymous, 1871) published in September 1871 in *Gardeners' Chronicle*, which also validly established the name. This brief notice, sometimes attributed to J. G. Baker (e.g., Watson, 1880: 167) but more likely the work of M. Thomas Masters (John Wiersema and Brent Elliott, pers. comm. 2001), attributes the name to earlier "New York publications," but that precise reference—which may well be the first instance of the name—has not been found. Baker (1873) subsequently published *L. columbianum* hort. Leichtlin without an adequate description: only the distribution was given, and this could not have been considered by him to distinguish the plant from others (Greuter et al., 2000, Art. 32.2). In his revision of the Tulipae, Baker

(1874) then validly published the name as *L. columbianum* Hanson in hort., Leichtlin. It is this last that is usually cited in floras and other works, the authority variously given as Hanson, or Baker, or Hanson ex Baker. Although Baker (1874) ascribed the name to Hanson rather than to himself as he does for other *nomina nova* in this work, no indication is given that Hanson contributed to the description; this later homonym is perhaps best cited (Greuter et al., 2000, Art. 46.4) as *L. columbianum* hort. Hanson ex Baker (1874).

A NOTE ON THE PRIORITY OF *LILIUM KELLEYANUM* LEMMON

Eastwood's (1902) *Lilium pardalinum* Kellogg [var.] *parviflorum* Eastwood precedes Lemmon's (1903) publication of *L. kelleyanum*, but as noted above, at the rank of species her epithet *parviflorum* becomes a later homonym of *L. parviflorum* (Hooker) W. G. Smith (1874) (= *L. columbianum* hort. Leichtlin, in Ducharte, 1871). Therefore the next legitimate specific epithet must be adopted (Greuter et al., 2000, Art. 11.3), and this is Lemmon's (1903) *L. kelleyanum*. Lemmon's description is somewhat incomplete but it well fits the plant now known as *L. kelleyanum*, especially his flower size [segment length 1–1.5 inches (2.5–4 cm)]. His obscure reference (1903: 300) to “plants of the larger, yellow-flowered lily [that] abound in the vicinity” is probably to *L. pardalinum* Kellogg subsp. *pardalinum* growing at lower elevations. The type localities that he cited in the protologue—along Bubb's Creek and Copper Creek in Fresno County, California—are located near the center of the range of *L. kelleyanum*, and there are no other *Lilium* with small flowers (segments < ca. 7 cm) until the southern limit of *L. parvum* Kellogg is reached about 60 miles to the north.

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